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Apparatus and Process for Mixing Two Fluids

FIELD OF THE INVENTION

This invention relates to an apparatus and a process for mixing at least two fluids, particularly fluids having differing viscosities.

BACKGROUND OF THE INVENTION

For the industrial production of fluid mixtures, such as beverages or suspensions, consisting of two or more fluid components, a first and a second fluid are often made to flow from two separate fluid lines conducting the two fluids separately into a fluid line forwarding the two fluids together.

The mixing ratio of such a fluid mixture of predeterminable mass or predeterminable volume to be produced by mixing a first fluid, held in a first fluid line, and a second fluid, held in a second fluid line, is commonly set with the aid of a ratio control system. A process implementing such ratio control commonly comprises the steps of:

causing the first fluid to flow into a third fluid line, connected at least intermittently to the first fluid line, in accordance with a predeterminable set point for a volumetric or mass flow rate of the first fluid;

causing the second fluid to flow into the third fluid line, which is also at least intermittently connected to the second fluid line;

measuring the volumetric or mass flow rate of the first fluid and generating a first measurement signal, which represents the measured flow rate of the first fluid;